

SECTION III – A

QUALITY CRITERIA FOR RESOURCE MANAGEMENT SYSTEMS

Introduction

This section provides information that is used when developing a **Resource Management System (RMS)** to treat or prevent problems associated with soil, water, air, plant, and animal resources (SWAPA). An RMS is a combination of conservation practices that when applied will meet or exceed minimum **Quality Criteria** for all identified resource concerns.

During the conservation planning process, the five natural resources and their associated social, economic, and cultural considerations are assessed to identify concerns affecting the use, management, and sustainability of each SWAPA resource. *(Refer to the NRCS National Planning Procedures Handbook, Parts 600.23 and 600.40, for additional guidance and tools to use in the inventory process.)* Quality Criteria establish the minimum level of treatment needed in an RMS to adequately treat the identified natural resource concerns. Resource sustainability, protection, and conservation are achieved when the Quality Criteria for SWAPA are met.

An RMS must be developed in accordance with all applicable federal, state, and local regulations and program requirements, including appropriate

consideration of ecological, economic, and social factors. An RMS is considered fully applied when all of the conservation practices that make up the system have been implemented according to the applicable Conservation Practice Standards in Section IV of the FOTG.

The tables in Section III-A establish Quality Criteria for treatment of concerns affecting the following natural resources:

[Soil](#)

[Water](#)

[Air](#)

[Plants](#)

[Animals](#)

The tables include lists of conservation practices that are often used to treat the identified concerns or problems, and also contain recommendations for tools that can be used to assess current conditions and effects of practices.

Quality Criteria for Resource Management Systems

SOIL			
RESOURCE CONSIDERATION: EROSION			
<i>Description of Concerns and Problems</i>	<i>Quality Criteria for Treatment</i>	<i>Frequently Used Practices</i>	<i>Assessment Tools</i>
Sheet and Rill Erosion – Soil particles are removed from the soil surface by water flowing uniformly across the land. Erosion is adversely affecting the long-term sustainability of the soil resource.	Cropland – Soil loss does not exceed the sustainable soil loss tolerance amount ("T") for the rotation of the Management Unit. Pasture/other land – Soil loss is less than 1 ton per acre per year.	Conservation Cover 327; Conservation Crop Rotation 328; Contour Farming 330; Stripcropping, Contour 585; Cover Crop 340; Critical Area Planting 342; Residue Mgmt 329A, 329B, 329C, and 344.	FOTG – Section I: Revised Universal Soil Loss Equation (RUSLE).
Wind Erosion – Fine soil particles are selectively removed from the soil surface and redistributed by wind. Erosion is adversely affecting the long-term sustainability of the soil resource, or causing damage to crops, other resources, or property.	Soil loss does not exceed the sustainable soil loss tolerance amount ("T") for the soil mapping unit, or the crop tolerance level, whichever is more restrictive. No visual or measurable damage to property, crops, land or water.	Conservation Cover 327; Cover Crop 340; Critical Area Planting 342; Residue Mgmt 329A, 329B, 329C, and 344; Windbreak/Shelterbelt Establishment 380.	Visual evidence of blowing soil, deposition, or damage due to wind-borne particles.
Ephemeral Gully – Concentrated flow of runoff water is causing re-occurring gullies on cropland, adversely affecting the long-term sustainability of the soil resource. These gullies are usually obscured by tillage operations.	Affected areas are stabilized and ephemeral gully erosion is controlled. No recent formation of rills.	Conservation Cover 327; Critical Area Planting 342; Diversion 362; Residue Mgmt 329A, 329B, 329C, and 344.	Visual evidence of rills, ephemeral gullies, and deposition.
Classic Gully – Concentrated flow of runoff water is producing eroded channels that are too deep to be obscured by normal farming operations. These gullies are interfering with agricultural and other land uses, and may enlarge by head-cutting and lateral widening.	Head cutting is stopped. Channel bottom and side slopes are stabilized.	Diversion 362; Grade Stabilization Structure 410; Grassed Waterway 412; Lined Waterway or Outlet 468; Subsurface Drain 606; Water and Sediment Control Basin 638.	Visual evidence of active head cutting, sloughing of side-slopes, or changes in cross section and/or gully length. Historical photography and client records may also be helpful.

SOIL

RESOURCE CONSIDERATION: EROSION (continued)

<i>Description of Concerns and Problems</i>	<i>Quality Criteria for Treatment</i>	<i>Frequently Used Practices</i>	<i>Assessment Tools</i>
Soil Mass Movement – Unstable soil on sloping land is resulting in a large volume of soil movement. Soil slippage, landslides or slope failure is causing physical damage to vegetation, limiting land use, or creating a safety hazard.	Soil mass movement is prevented or reduced to a rate that no visual or measurable damage to property, crops, land or water is apparent.	Critical Area Planting 342; Diversion 362; Grade Stabilization Structure 410; Grassed Waterway 412; Lined Waterway or Outlet 468; Subsurface Drain 606.	Visual evidence of massive soil movement. Historical photography and client records may also be helpful.
Soil Deposition – Eroded soil is moved and redeposited at another location by water or wind, causing physical damage to vegetation, limiting land use, or creating a safety hazard.	Deposition is prevented or reduced to a rate that no visual or measurable damage to property, crops, land or water is apparent.	Conservation Cover 327; Critical Area Planting 342; Grade Stabilization Structure 410; Water and Sediment Control Basin 638.	Visual evidence of soil deposition.
Streambanks – Sloughing of streambanks is caused by unstable soils, flow obstructions, unstable channel bottoms, livestock, or equipment use. Bank erosion is impairing adjacent land uses, riparian habitat, or water quality.	Streambanks are stabilized and not subject to accelerated erosion. (The actions of the decision maker do not contribute to bank sloughing, and are controlled to the extent technically and economically feasible.) Erosion is reduced to a rate that will not cause interference with the intended uses of land or water.	Critical Area Planting 342; Fence 382; Streambank and Shoreline Protection 580; Use Exclusion 472.	Visual evidence of unstable banks. "Stream Visual Assessment Protocol" (NRCS, 1999).
Beach or Wave Induced – Soil is eroded by wind and wave action, causing physical damage to vegetation, limiting land use, or creating a safety hazard. Roads, buildings, and other structures may be damaged.	Erosion is reduced to a rate that will not cause interference with the intended land use.	Critical Area Planting 342; Streambank and Shoreline Protection 580; Windbreak/Shelterbelt Establishment 380.	Visual evidence of blowing soil, deposition, or damage due to wind and wave action.

SOIL			
RESOURCE CONSIDERATION: EROSION (continued)			
<i>Description of Concerns and Problems</i>	<i>Quality Criteria for Treatment</i>	<i>Frequently Used Practices</i>	<i>Assessment Tools</i>
Construction Sites – Erosion is not controlled, resulting in excessive movement of soil off-site.	Erosion on construction sites is controlled to prevent off-site sedimentation in accordance with state and local laws.	Critical Area Planting 342; Diversion 362; Water and Sediment Control Basin 638.	Visual evidence of off-site soil movement and deposition.
Roadbanks and Scoured Areas – Sloughing of banks is caused by unstable soils, flow obstructions, or inappropriate use of equipment. Erosion is impairing the use or maintenance of an area.	Roadbank and scour erosion is reduced to a rate that will not cause interference with the intended land use or contribute to off-site damages.	Critical Area Planting 342; Diversion 362; Fence 382; Water and Sediment Control Basin 638.	Visual evidence of rills, gullies, and deposition.

SOIL

RESOURCE CONSIDERATION: CONDITION

<i>Description of Concerns and Problems</i>	<i>Quality Criteria for Treatment</i>	<i>Frequently Used Practices</i>	<i>Assessment Tools</i>
Soil Tilth – Soil tilth is not adequate to support the desired level of plant growth. (Soil tilth is defined as a physical soil condition based on suitable combinations of mineral, air, water, and organic matter, resulting in a proper medium in which microbial activity and chemical reactions can occur.)	The actions of the decision-maker improve the physical condition of the soil, and eliminate or reduce the identified tilth problem to a level that does not impair plant growth.	Conservation Crop Rotation 328; Residue Mgmt 329A, 329B, 329C, and 344; Contour Farming 330; Stripcropping, Contour 585; Subsurface Drain 606.	"Maryland Soil Quality Assessment Book" (NRCS, December, 1997). (http://www.statlab.iastate.edu/survey/SQI/pdf/MDd.pdf) Soil Quality Test Kit Guide. (http://www.statlab.iastate.edu/survey/SQI/kit2.html)
Soil Compaction – Excessive compression of soil particles and aggregates by equipment, livestock, or natural consolidations is adversely affecting plant-soil-moisture-air relationships.	Compaction is reduced by limiting traffic on agricultural fields and other areas, especially when wet. There are no active pans (compacted soil layers) that reduce water infiltration or restrict rooting depth.	Conservation Crop Rotation 328; Residue Mgmt 329A, 329B, 329C, and 344; Contour Farming 330; Fence 382; Stripcropping, Contour 585; Subsurface Drain 606.	NRCS Soil Conditioning Index. (ftp://ftp.nccs.nrcs.usda.gov/pub/agronomy/SCIfiles/latest_revisions/)
Soil Contamination – Excess accumulation of animal wastes, organic by-products, chemical content, salinity, selenium, boron or heavy metals are restricting the desired use of the soil. Contaminants include desirable and undesirable chemical elements either in organic or inorganic forms.	Soil contaminants are absent, or are present at levels that do not adversely affect other resources. Application of all organics and chemicals is in compliance with all federal, state, and local laws. Plant production is not limited by excessive soil contaminants.	Nutrient Management 590; Pest Management 595; Waste Utilization 633.	Soil tests conducted by the University of Maryland Soil Testing Laboratory, or other testing laboratory whose techniques are consistent with the University of Maryland.

WATER

RESOURCE CONSIDERATION: QUANTITY

<i>Description of Concerns and Problems</i>	<i>Quality Criteria for Treatment</i>	<i>Frequently Used Practices</i>	<i>Assessment Tools</i>
<p>Excess Surface Water – Water accumulates on the surface of the land due to ponding or flooding, or subsurface water from springs or seeps flows across the surface of the land. Excess water adversely affects the growth of desired plants, causes damage to land or structures, or impairs the use of an area.</p>	<p>Water is controlled to the extent that there is no observable damage to land, crops, or structures, and use of an area is not impaired. Control and management of excess surface water is in accordance with all applicable federal, state, and local regulations.</p>	<p>Subsurface Drain 606; Structure for Water Control 587; Surface Drainage, Field Ditch 607; Surface Drainage, Main or Lateral 608.</p>	<p>Visual evidence of ponding, flooding, or springs/seeps. Historical photography and client records may also be helpful.</p> <p>Hydrologic assessment for the appropriate storm frequency (e.g, the 10-year, 24-hour storm event).</p> <p>Soil survey data.</p>
<p>Excess Subsurface Water – Subsurface water accumulates in the soil profile to an extent that plant growth or use of an area is adversely affected.</p>	<p>Subsurface water is reduced to a level that does not restrict the desired land use. Control and management of excess subsurface water is in accordance with all applicable federal, state, and local regulations.</p>	<p>Subsurface Drain 606; Surface Drainage, Field Ditch 607; and Surface Drainage, Main or Lateral 608.</p>	<p>Visual evidence of saturated soil conditions. Historical photography and client records may also be helpful.</p> <p>On-site investigation of the soil profile to determine seasonal water table levels.</p> <p>Soil survey data for seasonal high water tables.</p>
<p>Insufficient Water Supply – Lack of sufficient water is limiting agricultural production, fish habitat, or human use of an area.</p>	<p>Additional water is supplied to meet the identified needs by use of wells, ponds, water control structures, irrigation systems, or other applicable measures. Water is supplied in accordance with all applicable federal, state, and local regulations.</p>	<p>Spring Development 574; Structure for Water Control 587; Pond 378; Water Well 642; Watering Facility 614.</p>	<p>Client records and verbal information.</p> <p>Local climate data and rainfall records.</p>

WATER			
RESOURCE CONSIDERATION: QUALITY			
<i>Description of Concerns and Problems</i>	<i>Quality Criteria for Treatment</i>	<i>Frequently Used Practices</i>	<i>Assessment Tools</i>
Sediment – Excessive levels of sediment are degrading uses of surface water for human consumption, irrigation, livestock watering, fish and wildlife habitat, or other purposes.	Sediment delivery to surface water is reduced to levels that do not adversely affect water use. Water meets applicable federal, state, and local standards for the intended use.	Conservation Cover 327; Critical Area Planting 342; Filter Strip 393; Riparian Forest Buffer 391; Streambank and Shoreline Protection 580.	SCS-TP-161 – "Water Quality Indicators Guide: Surface Waters" (SCS, 1991). "Stream Visual Assessment Protocol" (NRCS, 1999). Local, state, or federal water quality studies.
Nutrients and Organics – Surface and groundwater pollution problems are occurring due to the application of natural, manufactured, animal or other sources of nutrients. Excessive levels of nitrogen, phosphorus, or total organic carbon are impairing water use.	Application of all added nutrients and organic matter is in balance with plant requirements, considering all nutrient sources, yield goals, climatic factors, and methods of application. Nutrients and animal wastes are applied at rates, forms, and times so that there is no significant runoff beyond field boundaries. Applicable federal, state, and local regulations are followed. Water meets applicable federal, state, or local standards for the intended use. Risk assessment (using an appropriate assessment method) results in an acceptable rating, or minimum standards for Nutrient Management 590 are met.	Composting Facility 317; Filter Strip 393; Nutrient Management 590; Riparian Forest Buffer 391; Waste Storage Facility 313; Waste Treatment Lagoon 359; Waste Utilization 633; Wastewater Treatment Strip 635.	Well testing. Soil testing (PSNT, Indices and Stalk Nitrate Test, or other tissue tests for other crops to monitor available nutrients). Nitrate Leaching Index. Phosphorus Leaching Index.
Pathogens – Excessive levels of pathogens such as bacteria, viruses, protozoa, or fungi are found in surface or groundwater, and are impairing water use. Excessive levels of pathogens may result from improper treatment and application of animal wastes and sewage sludge.	Pathogens are reduced to levels that do not adversely affect the use of ground or surface water. Sewage sludge and animal wastes are properly treated and applied. Water meets applicable federal, state, and local standards for the intended use.	Composting Facility 317; Nutrient Management 590; Waste Storage Facility 313; Waste Treatment Lagoon 359; Waste Utilization 633; Wastewater Treatment Strip 635.	

WATER

RESOURCE CONSIDERATION: QUALITY (continued)

<i>Description of Concerns and Problems</i>	<i>Quality Criteria for Treatment</i>	<i>Frequently Used Practices</i>	<i>Assessment Tools</i>
Heavy Metals – Excessive levels of metals such as chromium, iron, lead, zinc, copper and cobalt are found in surface or groundwater, and are impairing water use. Heavy metals can occur in industrial effluents, sewage sludge, or other municipal wastes.	Heavy metals are reduced to levels that do not adversely affect the use of ground or surface water. Effluents, sludge, and other wastes are properly treated and applied. Water meets applicable federal, state, and local standards for the intended use.	Nutrient Management 590; Waste Utilization 633.	Local, state, or federal water quality studies. Well testing. Soil testing.
Pesticides – Excessive levels of pesticides are degrading uses of surface and groundwater for human consumption, livestock watering, irrigation, or fish and wildlife habitat. Pesticides include chemicals that are used to manage weeds, insects, and diseases.	Pesticides are applied in accordance with all label directions. The intended uses of surface and groundwater are not limited. Pertinent federal, state, and local regulations are followed so that water quality standards are not violated. Risk assessment (using an appropriate assessment method) results in an acceptable rating, or the minimum standards for Pest Management 595 are met.	Conservation Crop Rotation 328; Pest Management 595.	Local, state, or federal water quality studies. Well testing. WIN-PST.
Temperature – The temperature of surface waters is adversely affected by human activities, and does not support intended uses. High temperatures may result from removal of streambank vegetation (especially trees) that provide shade, and from discharges of warm water from industrial, municipal, or agricultural sources.	Water temperature is suitable for the intended uses, and meets or exceeds standards established by federal, state and local laws. Refer to the Code of Maryland Regulations (COMAR 26.08.02) for temperature standards by stream use classification.	Tree/Shrub Planting 612; Riparian Forest Buffer 391; Streamabank and Shoreline Protection 580.	On-site temperature monitoring. "Stream Visual Assessment Protocol" (NRCS, 1999) and other rapid assessment protocols. Local, state, or federal water quality studies.

WATER

RESOURCE CONSIDERATION: QUALITY (continued)

<i>Description of Concerns and Problems</i>	<i>Quality Criteria for Treatment</i>	<i>Frequently Used Practices</i>	<i>Assessment Tools</i>
Aquatic Habitat Suitability – The ability of surface waters to support aquatic life is limited by poor riparian and in-stream habitat, high temperatures or turbidity, or reduced floodplain functions.	Conditions that limit aquatic habitat are improved to the extent that plants and animals of concern can grow, reproduce and perpetuate at sustainable levels.	Conservation Cover 327; Filter Strip 393; Tree/Shrub Planting 612; Riparian Forest Buffer 391; Streambank and Shoreline Protection 580.	"Stream Visual Assessment Protocol" (NRCS, 1999) and other rapid assessment protocols. Local, state, or federal aquatic habitat studies.

AIR

RESOURCE CONSIDERATION: QUALITY

<i>Description of Concerns and Problems</i>	<i>Quality Criteria for Treatment</i>	<i>Frequently Used Practices</i>	<i>Assessment Tools</i>
Airborne Sediment and Other Particulates – Particulates are impairing visibility, causing equipment or structural problems, or health problems.	Particulate movement is controlled so as not to impair visibility, damage equipment or structures, or cause human or animal health problems. Activities are in compliance with applicable federal, state, and local requirements.	Conservation Cover 327; Critical Area Planting 342; Windbreak/Shelterbelt Establishment 380.	Visual evidence of airborne sediment or smoke. Local air quality indexes. Local monitoring data for particulate matter (Clean Air Act monitoring).
Airborne Chemical Drift – Pesticides and nutrients that are applied on or above the land surface are moving beyond intended site of application, causing damage to adjacent land and water areas, or to human and animal health.	Airborne drift of chemicals is controlled so that damage does not occur to adjacent lands and waters, or to human and animal health. Chemicals are applied in accordance with all label directions. Federal, state and local regulations pertaining to the application of pesticides and other chemicals are followed.	Nutrient Management 590; Pest Management 595; Windbreak/Shelterbelt Establishment 380.	Visual evidence of offsite impacts from chemical drift (e.g., dead or weakened plants and animals adjacent to chemical application areas).
Airborne Odors – Objectionable odors are emanating from sources such as poultry houses, other confined livestock areas, waste lagoons, and field application of animal wastes and other organic matter.	Offensive odors are controlled or minimized so that they are not chronically objectionable to surrounding residents and communities. Reasonable odor control measures are implemented. Concerns of nearby residents are taken into consideration before field-applying animal wastes. Activities are in compliance with applicable federal, state, and local requirements.	Waste Utilization 633; Windbreak/Shelterbelt Establishment 380.	On-site observations of objectionable odors. Complaints from neighbors. NRCS Agricultural Waste Field Handbook. Managing Livestock Odor, NRCS Mid-Atlantic IRT Technical Note #8.

PLANTS

RESOURCE CONSIDERATION: HEALTH AND PRODUCTIVITY

<i>Description of Concerns and Problems</i>	<i>Quality Criteria for Treatment</i>	<i>Frequently Used Practices</i>	<i>Assessment Tools</i>
<p>Suitability – Plants are unsuitable for the intended use or are not adapted to site conditions. As a result, the quantity and quality of plants for crops, forage, timber production, protective cover, wildlife habitat, or landscaping is not sufficient to meet desired yield goals or other management objectives.</p>	<p>Plants selected, or being managed, are suitable for the intended use, and are adapted to the soil and climactic conditions of the area. Alternatively, site conditions are improved to support the existing plant community. Productivity is sufficient to meet the client's objectives, and does not result in degradation of other resources.</p>	<p>Conservation Cover 327; Critical Area Planting 342; Pasture and Hay Planting 512; Tree/Shrub Establishment 612; Windbreak/Shelterbelt Establishment 380; Wetland Restoration 657.</p>	<p>Visual evidence of poor plant quality and quantity.</p> <p>NRCS planting guides and jobsheets.</p> <p>PLANTS database.</p>
<p>Establishment and Management – The proper techniques and timing are not used for site preparation, planting, and management, resulting in poor survival, growth, and/or productivity of desired plant species.</p>	<p>Appropriate establishment techniques are used to meet plant needs and the client's objectives. Site preparation, planting, and management is done at the recommended time and manner to enhance survival, growth, and productivity of desired species.</p> <p>Cropland, pasture, hayland: The desired crop is a healthy vigorous stand capable of meeting at least 75% of the producer's yield goals.</p> <p>Woodland: Forest overstory stocking levels are within acceptable levels as determined by a professional forester.</p>	<p>Brush Management 314; Conservation Cover 327; Critical Area Planting 342; Forage Harvest Management 511; Forest Stand Improvement 666; Pasture and Hay Planting 512; Tree/Shrub Establishment 612; Windbreak/Shelterbelt Establishment 380; Wetland Restoration 657.</p>	

PLANTS

RESOURCE CONSIDERATION: HEALTH AND PRODUCTIVITY (continued)

<i>Description of Concerns and Problems</i>	<i>Quality Criteria for Treatment</i>	<i>Frequently Used Practices</i>	<i>Assessment Tools</i>
<p>Nutrients – Plants are yellow, stunted, or stressed. The correct amount of plant nutrients is not available to meet plant needs. This results in reduced growth and low plant productivity that is not sufficient to meet desired yield goals or other management objectives.</p>	<p>Nutrients are available to meet the needs of plants, without having adverse effects on other resources. A nutrient management plan is being followed.</p>	<p>Nutrient Management 590.</p>	<p>Visual evidence of poor plant quality and quantity.</p> <p>University of Maryland Cooperative Extension guidance for crop nutrient requirements.</p> <p>Soil test analysis.</p>
<p>Pests – Insects, disease, wildlife, or competition from undesirable plant species (e.g., weeds, invasive species) are causing significant damage to crops or other desired plant species. Productivity is not sufficient to meet desired yield goals or other management objectives.</p>	<p>Pests are managed based on threshold levels (where available) to achieve the client's desired production levels. Pest management does not result in the degradation of other resources. Noxious weeds are controlled as required by state law.</p>	<p>Brush Management 314; Pest Management 595.</p>	<p>Visual evidence of damage due to plant pests.</p> <p>University of Maryland Cooperative Extension guidance for pest management.</p> <p>Client records and verbal information.</p>

ANIMALS

RESOURCE CONSIDERATION: HEALTH AND PRODUCTIVITY--LIVESTOCK

<i>Description of Concerns and Problems</i>	<i>Quality Criteria for Treatment</i>	<i>Frequently Used Practices</i>	<i>Assessment Tools</i>
Food – Food is not available in sufficient quantity, quality, or distribution to meet the seasonal requirements of livestock, including aquaculture species. Desired production goals or other management objectives are not met.	Food is provided to meet the nutritional requirements of livestock. Health, growth, reproduction, lactation, and general well-being is in accordance with accepted criteria.	Conservation Cover 327; Fishpond Management 399; Pasture and Hay Planting 512; Prescribed Grazing 528A.	Visual evidence of insufficient food, water, cover/shelter. Recommended vs. actual stocking rates for available area.
Water – Water is not available in sufficient quantity, quality, or distribution to meet the seasonal requirements of livestock, including aquaculture species. Desired production goals or other management objectives are not met.	Water supply is of sufficient quality and quantity, and is properly distributed to meet daily needs of the species of concern. Water is supplied in accordance with all applicable federal, state, and local regulations.	Fishpond Management 399; Spring Development 574; Structure for Water Control 587; Pond 378; Water Well 642; Watering Facility 614.	Client records and verbal information.
Cover or Shelter – Adequate cover or shelter is not available to protect livestock, including aquaculture species, from the adverse effects of seasonal weather extremes. Desired production goals or other management objectives are not met.	Livestock are provided with adequate shelter to protect them from inclement weather. Fish are provided with water of sufficient depth to support the desired population.	Fishpond Management 399; Pond 378; Tree/Shrub Establishment 612; Windbreak/Shelterbelt Establishment 380.	
Growth, Reproduction, and Condition – Poor health of livestock, including aquaculture species, is resulting in reduced milk production, egg production, weight gain, or reproduction.	Poisonous plants, diseases, parasites, and insects are controlled at acceptable levels so that animal health is not degraded. Stocking rates are reduced to an acceptable level, or production facilities are expanded, to support a healthy population.	Fishpond Management 399; Pest Management 595; Prescribed Grazing 528A.	Visual evidence of poor animal health. Client records and verbal information.

ANIMALS

RESOURCE CONSIDERATION: HEALTH AND PRODUCTIVITY--LIVESTOCK (Continued)

<i>Description of Concerns and Problems</i>	<i>Quality Criteria for Treatment</i>	<i>Frequently Used Practices</i>	<i>Assessment Tools</i>
Degradation of Other Resources – High populations of livestock, including aquaculture species, are exceeding the carrying capacity of the management unit, resulting in degradation of soil, water, air, plants, or other animal communities.	Stocking rates are managed at levels that can be supported on the management unit without degrading other resources.	Fence 382; Fishpond Management 399; Prescribed Grazing 528A.	Visual evidence of degradation of soil, water, air, plants, or other animal communities.

RESOURCE CONSIDERATION: HEALTH AND PRODUCTIVITY--FISH AND WILDLIFE

<i>Description of Concerns and Problems</i>	<i>Quality Criteria for Treatment</i>	<i>Frequently Used Practices</i>	<i>Assessment Tools</i>
Food, Cover, and/or Water – Food, cover, and/or water are not available in sufficient quantity, quality, or distribution to meet the seasonal requirements of desired fish and wildlife species.	Food, cover, and water are provided as appropriate to meet the seasonal needs of the desired species. Upland habitat has a quality rating of 0.5 or more.	Conservation Cover 327; Field Border 386; Filter Strip 393; Hedgerow Planting 422; Pond 378; Riparian Forest Buffer 391; Shallow Water Area for Wildlife 646; Tree/Shrub Establishment 612; Upland Wildlife Habitat Management 645; Wetland Creation 658; Wetland Restoration 657; Wetland Wildlife Habitat Management 644.	Visual evidence of insufficient food, cover, and/or water. Maryland NRCS Wildlife Habitat Evaluation Worksheets. Client records and verbal information.
Degradation of Other Resources – High populations of fish and wildlife are exceeding the carrying capacity of the management unit, resulting in degradation of soil, water, air, plants, or other animal communities.	Fish and wildlife populations are controlled to the extent feasible, in accordance with applicable federal, state, and local regulations.	Fence 382; Fishpond Management 399; Pest Management 595; Upland Wildlife Habitat Management 645; Wetland Wildlife Habitat Management 644.	Visual evidence of degradation of soil, water, air, plants, or other animal communities. Local, state, or federal wildlife population studies and resource assessments.